The neurological masters of a generation ago [1,2,3,6,7] noted that this reflex was only extraordinarily absent, and quote Ziehen,[4] who found that, although the ankle jerks were frequently absent in CNS syphilis, senile dementia, and chronic alcoholism, there were only ten instances in which they were missing in 1,500 cases of functional mental disease; and that of these ten, six had old fractures or other non-neurological complications, making the reflex impossible. Bramwell[5] found that although the ankle jerk was always present in health under the age of fifty, it was absent in 63 per cent of sixty-five cases where the patients ranged between seventy and eighty years. Oppenheim[8] apparently viewed this high rate of absence as unusual.

In one thousand consecutive patients in the Stanford University medical out-patient department, absent ankle reflexes were very uncommon when some care was taken to obtain relaxation and reinforcement. Having the patient kneel on a pillow in a chair, and squeeze the back of the chair on command, and then putting the Achilles tendon under slight tension by pressing lightly on the ball of the foot, were the maneuvers resorted to when the reflexes were sluggish. This procedure was frequently necessary in elderly persons whose reflexes are often not lively, and about whom in particular the legend has grown up that ankle jerks are unimportant.

Out of the one thousand patients examined, there were only forty who had absent ankle jerks, and of these one jerk only was absent in eleven cases. Of these forty cases the absent reflex formed a part of a demonstrated neurological picture in eighteen cases, and occurred in sciatic neuritis in two others, leaving only ten, or 1.0 per cent without explanation. In the age groups below forty years, the reflex was absent in nine definite neurological cases. In the age groups between forty and fifty years there were thirteen instances of absent ankle jerks out of 226 cases, an incidence of 5.7 per cent. Nine of these cases were tabes dorsalis. Between the years fifty and sixty, there were eight absent out of 144 cases, 5.5 per cent. Of these, four had tabes. Between the sixtieth and seventieth year there were seven absent out of 104 cases, 6.7 per cent, with only one definitely neurological, a case of diabetic neuritis. In the age group between seventy and eighty, where Bramwell[5] found 63 per cent of absent reflexes, there were only two absent in fifty-eight cases, or 3.4 per cent of absence. Thus, even in the older groups, absent ankle jerks were infrequent, although their significance was not as obvious as in the age groups where tabes dorsalis was common. It is possible that among these elderly patients, attacks of sciatica, radiculitis, neuritis, or even unrecognized poliomyelitis which had been long since forgotten, were really causal.

One may conclude that absent ankle jerks, even in the elderly, are definitely abnormal, although their cause may remain undiscovered. The diagnostic significance of this reflex warrants routine examination.

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ECONOMIC ADVANTAGES OF LOCAL ANESTHESIA IN HERNIA OPERATIONS

There is a general opinion that local anesthesia is not suited for inguinal hernia operations. I have used local anesthesia almost exclusively for hernia operations for twenty years. I do not advocate spinal anesthesia.

As there is no necessity for speed with the patient conscious and comfortable, only an intern assistant is needed. The expense of the anesthetist and the general anesthetic is saved. The cost of the local anesthetic for a double inguinal hernia operation is only a few cents.

The hospital stay after local anesthesia is several days less than following general anesthesia. Many of these local anesthesia patients go home on the eighth to tenth day, as there are no postoperative disturbances to weaken the sutured incision. The absence of bronchitis and pulmonary complications is of great economic importance.

Local Anesthesia.—To my mind, there is only one contraindication to local anesthesia in all forms of hernia, and that is in the case of the patient who does not want it, who, for any reason, prefers to be asleep during the operation. To this type of patient, for any operation, I always administer a general anesthetic.

Local anesthesia removes the danger from ether pneumonia and renal insufficiency. Every step in the operation that is carried out under general narcosis may be done with local. The operation for inguinal hernia is the most successful in the entire field of local analgesia. In strangulation, with the accompanying lowered vitality, it is a safeguard against shock; and it also provides ample time to determine the viability of the gut, and when resection is necessary, it can be done without additional risk.

The physician who would use local anesthesia should remember that the successful operation is painless. Patients frequently fall asleep during the latter part of a single or double hernia operation, especially when the sac is extensively adherent and the gentle dissection is necessarily slow.

Dangers of General Anesthesia. — While explosion of a general anesthetic is rare, the danger of such an accident must be thought of—the possibility of serious burns or instant death from

rupture of the lungs. There is also the risk of death from general anesthesia, as well as a chance that the patient may develop disease or disability as a remote result of general narcosis.

No general anesthetic is as safe as local. Not even the newer gas-oxygen-ethylene mixtures, in the hand of an expert, can equal the safety of local anesthesia.

The Advantages of Local Anesthesia.—It is surprising how many people are instinctively unafraid of local anesthesia because it permits them to be awake during the operation. Many patients will consent to operation under the local method who would not consider it if it involved a general anesthetic; this applies especially to those who have had a stormy and protracted convalescence after taking ether.

Extreme old age, organic disease of the heart, lungs and kidneys, were formerly believed to be contraindications to the radical operation. With a good technique, there is practically no contraindication to the cure of every hernia regardless of the age of the patient. Some of the best results in my private practice have been with patients over seventy years old. My oldest local anesthesia hernia patient was eighty-four; the youngest, five.

With local anesthesia there is no danger of postoperative dilatation of the stomach, tympanites, renal insufficiency, or heart and lung complications; there is no vomiting and straining to weaken the hernial incision; and there is no necessity to starve the patient before the operation—debilitated patients need never miss a meal, which is an important point for frail or aged subjects. In over seven hundred hernia operations under local anesthesia, I have not had a single death from the anesthetic, or a case of postoperative pneumonia.

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NONSPECIFIC PROSTATITIS

Prostatitis is one of the common diseases most frequently misdiagnosed, because of the erroneous conception of its etiology and misinterpretation of the symptoms. While the majority of the general practitioners still consider gonorrhea and sexual irregularities as the only etiologic factors, very few of them are aware of the very existence of the so-called "nonspecific" prostatitis, and of the part played in its production by the focal infections (the sinuses, tonsils, teeth, colon, joints, tendons, and skin) as well as the more general, such as influenza, typhoid, measles, scarlet fever, pertussis, and others.

We are seeing an increasing number of men who have definite prostatitis without any antecedent gonorrheal history. The statistics of Von Lackum of the Mayo Clinic, in his group of secondary prostatitis, show that the predominant organism is streptococcus (35 per cent) and staphylococcus (22 per cent). Non-venereal infections of the prostate are very common, but generally receive very little consideration, because it is not generally known that various non-venereal organisms may easily find lodgment within the prostate. For instance, a man may contract a non-gonorrheal urethritis from his wife by contact during the menses: women who permit a profuse flora to develop in the vagina (from lack of personal hygiene) are apt to infect their husbands. Prostatitis may result from such non-gonorrheal infection of the urethra which may assume a course with but a few unpleasant symptoms. Auto-inoculation of the urethra, and eventually of the prostate, not infrequently occurs in men with long adherent prepuce; also in those who introduce objects within the urethra for onanistic purposes. Chemicals injected into the urethra for prophylactic purposes occasionally injure the canal, so that a nonspecific urethritis develops. Injury to the prostatic portion of the urethra, incident to cystoscopy, urethroscopy, catheterization, the passage of a urethral or ureteral stone, may so traumatize the tissues that infection ensues and invades the prostate. Cystitis secondary to pyelitis, ureteritis, urethral stricture or bladder stone is commonly the responsible factor for a "nonspecific prostatitis." Ulcerative colitis and rectal conditions, such as fissures, infected hemorrhoids, ischiorectal abscesses and proctitis, may give rise to *Bacterium coli* infection of the prostate gland, which is usually transmitted through the lymph system, whereas the urethral infections are carried into the prostate directly. General infections are transmitted to the prostate by the blood stream; for instance, in cases of prostatitis secondary to a carbuncle, influenza, typhoid fever, and so forth. Occasionally pathogenic protozoa (trichomonas, ameba) are found in the prostatic secretion.

No other gland in the male is as subject to infection as the prostate. Its secretions of albuminous and mucous substances constitute perfect culture media, and once an infection is established it is not easily attacked. Drainage of prostatic infection is very difficult, as the glandular portion of the prostate consists of numerous compound racemous glands, each group of which has a very narrow excretory duct, and stagnation of prostatic secretion within the alveoli is a common occurrence.

A peculiar point about nonspecific or secondary prostatitis is the frequent absence of characteristic genito-urinary symptoms which usually call the physician's attention to this organ. In these cases the prostate, though harboring focal infection, may be normal to the examining finger, but its secretion expressed by massage will be found to contain pus and bacteria. It is often necessary to repeat such examinations two or more times in order to express latent foci from the plugged-up acini; and to make the findings reliable. One should always consider the infected prostate as a possible cause of or contributing factor in the arthritic and neuralgic disturbances, and also in iritis and endocarditis.

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